TA-FE310R/FE510R

SERVICE MANUAL

AEP Model
TA-FE310R/FE510R
UK Model
TA-FE310R

Photo : TA-FE510R

SPECIFICATIONS

Amplifier section

DIN power output
TA-FE510R: 80 W+80 W (4 ohms at 1 kHz)
60 W+60 W (8 ohms at 1 kHz)
TA-FE310R: 55 W+55 W (4 ohms at 1 kHz)
45 W+45 W (8 ohms at 1 kHz)

Frequency response
PHONO (20 Hz-20 kHz): RIAA equalization curve ±0.5 dB
TUNER, CD, AUX, TAPE1/DAT,
TAPE2/MD: 7 Hz-70 kHz dB

S/N (network A)
PHONO: 80dB
TUNER, CD, AUX, TAPE1/DAT,
TAPE2/MD: 105 dB

Output voltage/ impedance
REC OUT: 200 mV, 1 kilohm
PHONES: 5 mW (at 8 ohms)

Speakers impedance:
4-16 ohms, 8-16 ohms (SPEAKERS A+B)

Damping factor
80 (8 ohms, 1 kHz)

General

System
Power amplifier: Pure-complementary SEPP OCL power amplifier with all stages directly coupled
Preamplifier. Low-noise, equalizer amplifier

Power requirements
Models not supplied with a voltage selector:
220-230 V AC, 50/60 Hz

Power consumption
TA-FE510R: 160 W
TA-FE310R: 120 W

Dimensions (approx.) (w/h/d):
430×105×300 mm
incl. projecting parts and controls

Mass (approx.)
TA-FE510R: 4.8 kg
TA-FE310R: 4.3 kg

Supplied accessories
Remote commander (remote) (1)
RM-S315
Sony batteries SUM-3 (NS) (2)

Design and specifications are subject to change without notice.

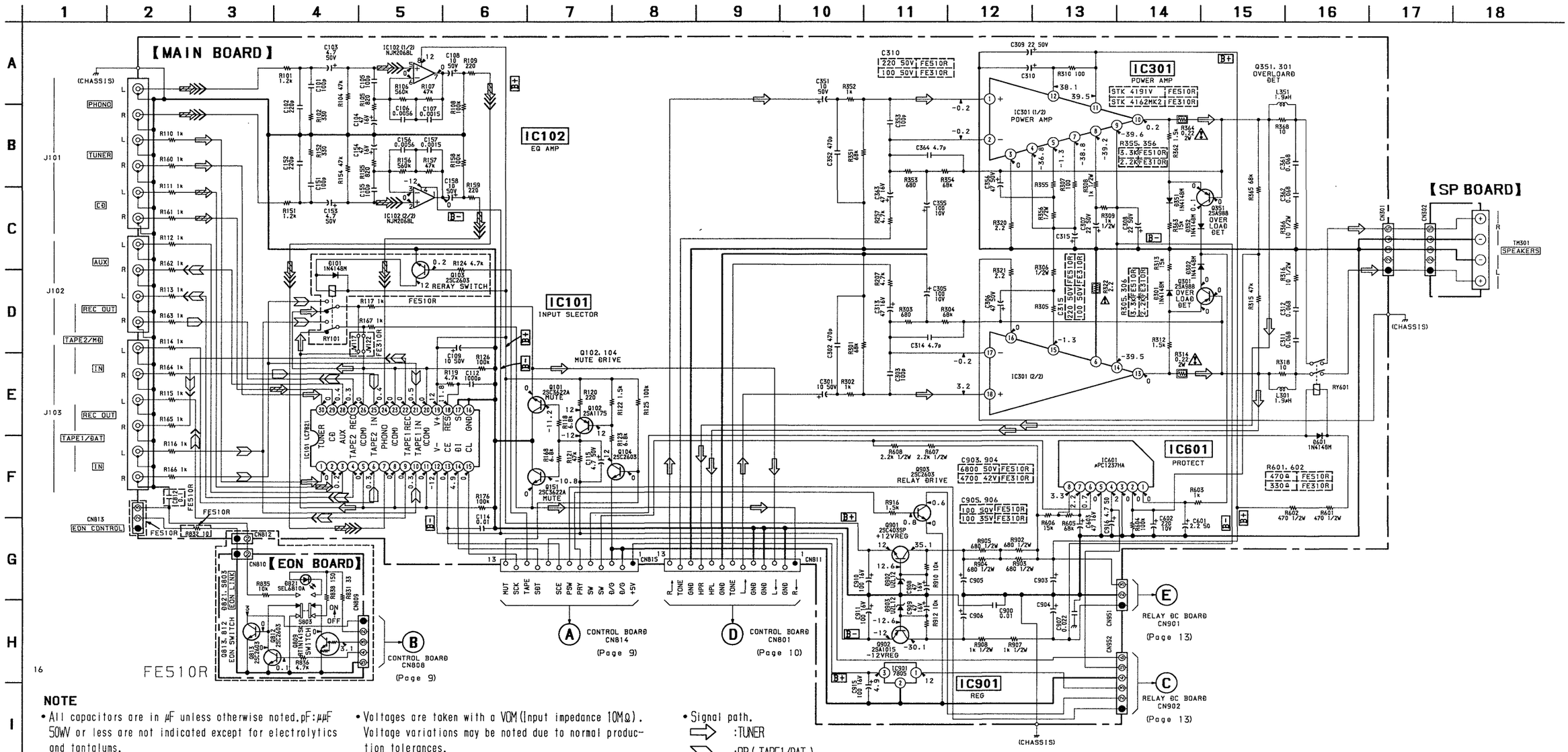
INTEGRATED STEREO AMPLIFIER

MICROFILM

SONY

2-3. SCHEMATIC DIAGRAM — MAIN SECTION —

• See page 14 for IC Block Diagrams.



NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ⏦ :nonflammable resistor.
- ▭ :panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

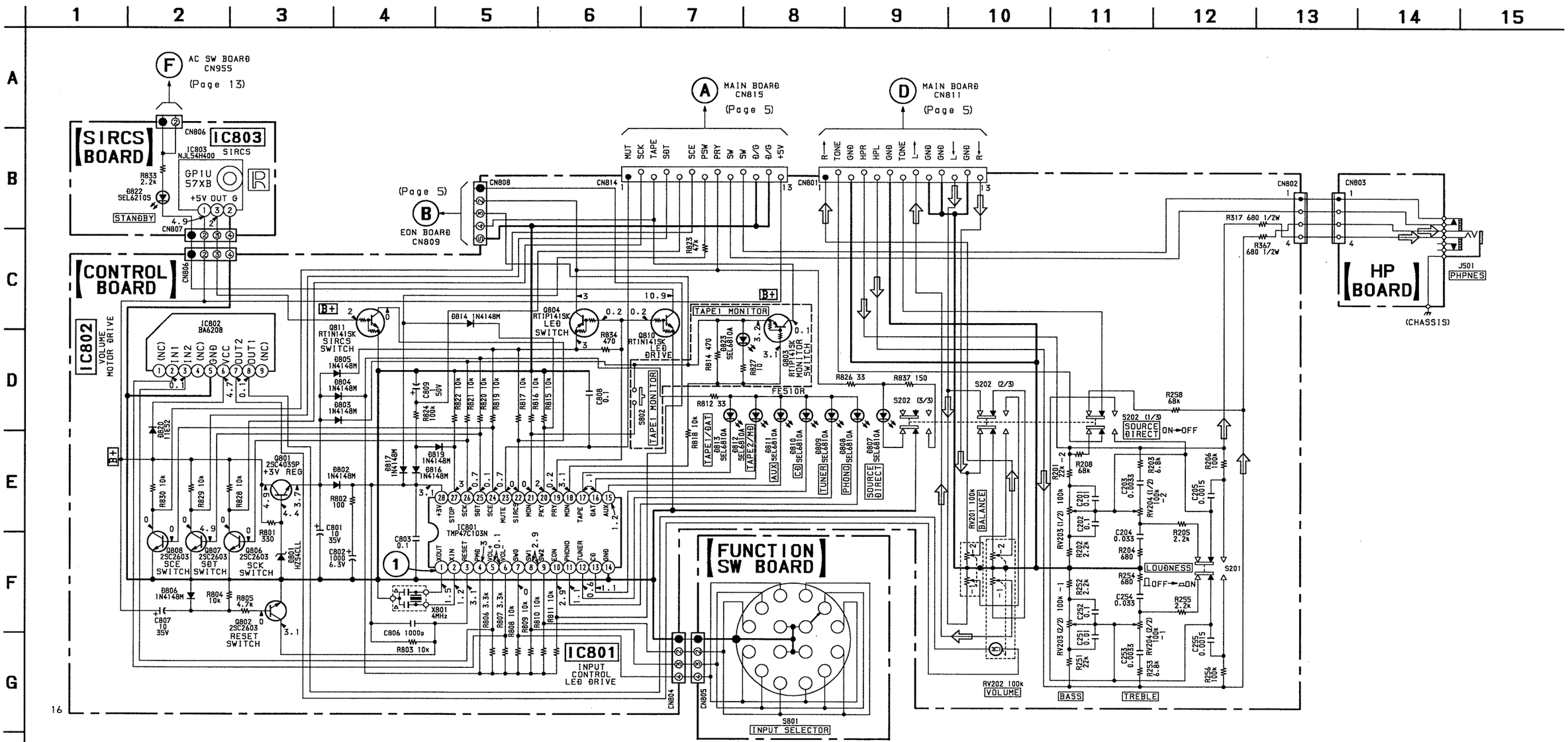
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- B+ :B+ Line.
- B- :B- Line.
- ▭ :adjustment for repair.
- Voltages are dc with respect to ground under no-signal conditions. no mark: TUNER

- Signal path.
  - ⇨ :TUNER
  - ⇨ :PB (TAPE1/BAT)
  - ⇨ :PB (TAPE2/MD)
  - ⇨ :REC
  - ⇨ :CD
  - ⇨ :PHONO

2-5. SCHEMATIC DIAGRAM — PANEL SECTION —

• See page 14 for IC Block Diagrams.

• See page 4 for IC Pin Function Description.



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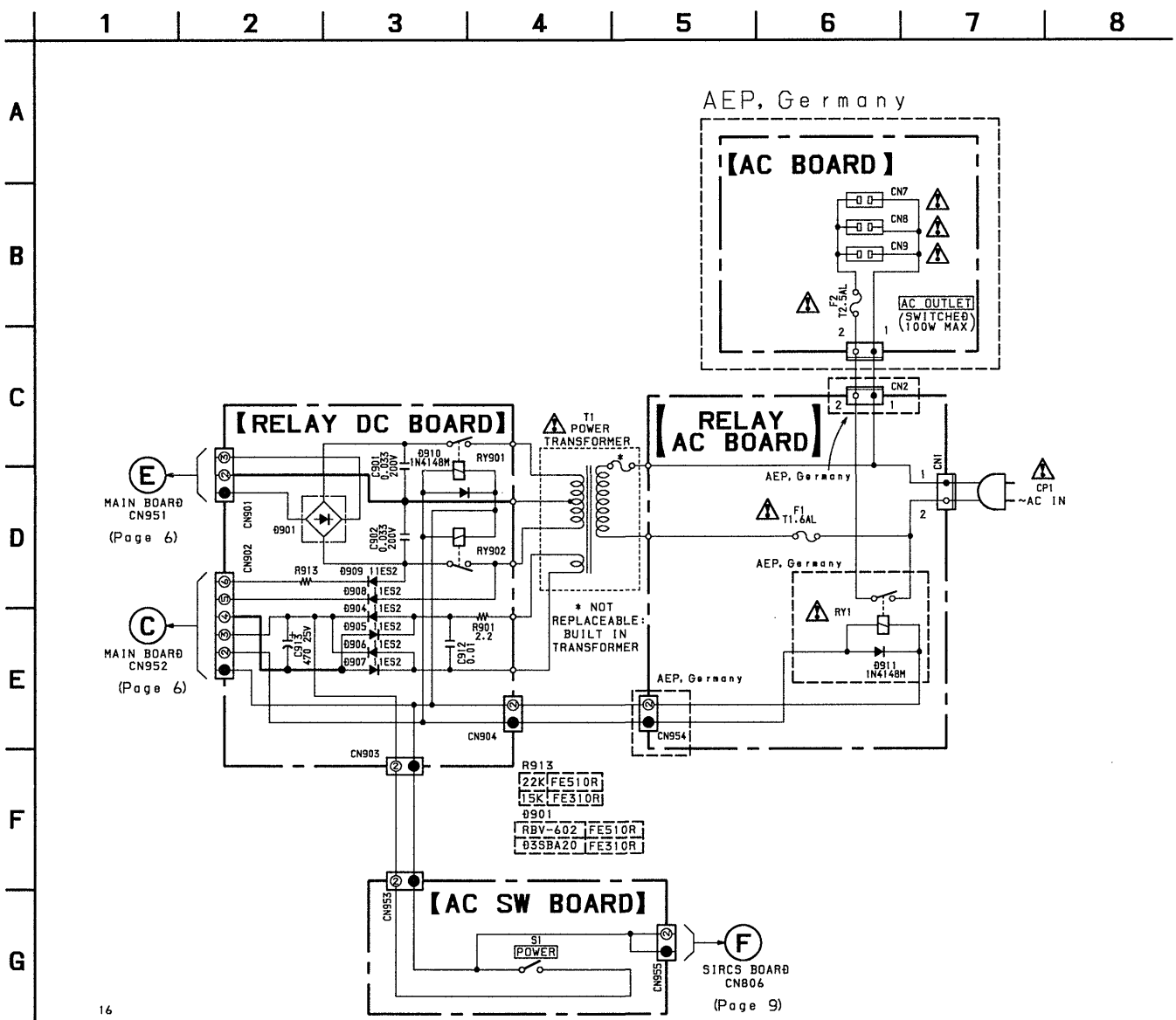
- ▭ :panel designation.
- B+ :B+ Line.
- B− :B− Line.
- ▭ :adjustment for repair.
- Voltages are dc with respect to ground under no-signal conditions. no mark: TUNER
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. ⇨ :TUNER

2-7. SCHEMATIC DIAGRAM — POWER SECTION —

• See page 11 for Printed Wiring Bord.



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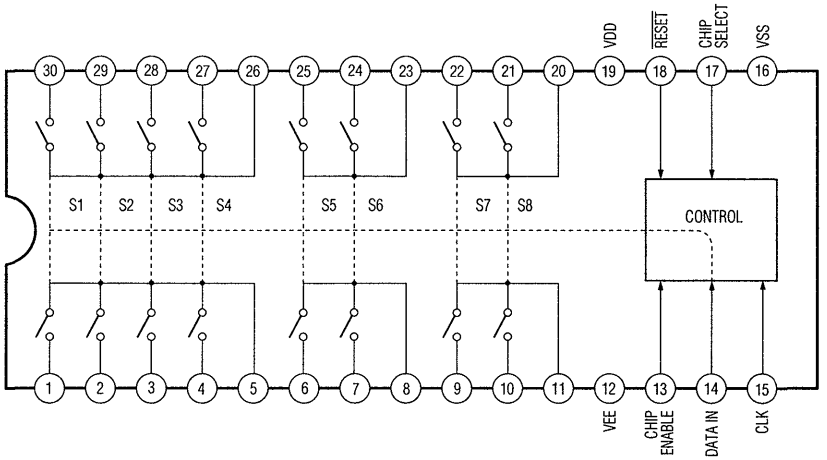
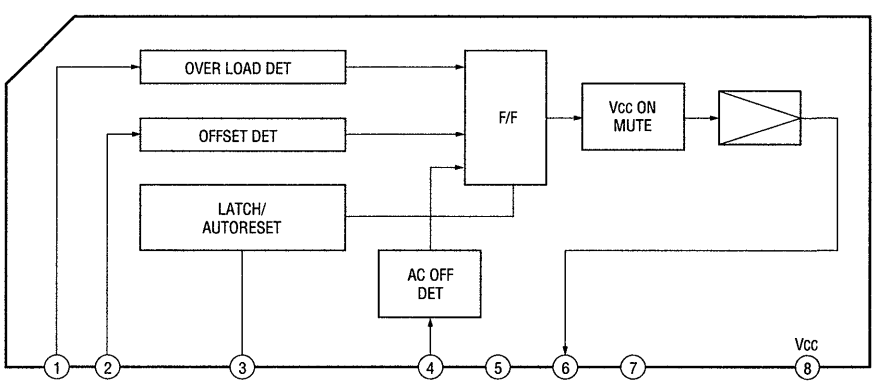
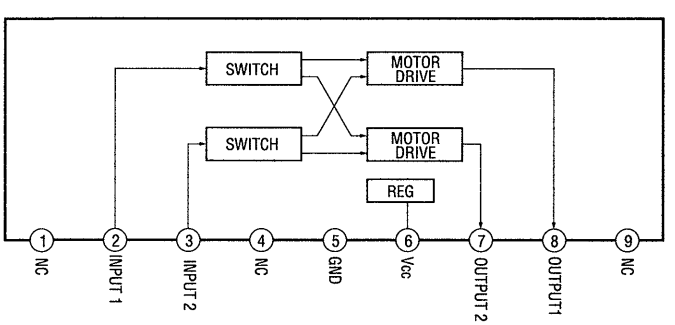
- Voltages are dc with respect to ground under no-signal conditions. no mark: TUNER
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

• IC Block Diagrams

IC101 LC7821



IC601 µPC1237HA



IC802 BA6208